# California Regional Water Quality Control Board North Coast Region

# ORDER NO. R1-2008-0110 (AMENDING AND SUPPLEMENTING) CEASE AND DESIST ORDER NO. R1-2006-0109

REQUIRING THE CITY OF FERNDALE WASTEWATER TREATMENT FACILITY TO CEASE AND DESIST FROM DISCHARGING OR THREATENING TO DISCHARGE EFFLUENT IN VIOLATION OF WASTE DISCHARGE REQUIREMENTS

ORDER NO. R1-2008-0038

WDID No. 1B831360HUM

#### Humboldt County

The Regional Water Quality Control Board, North Coast Region (hereinafter Regional Water Board), finds that:

- 1. The City of Ferndale (hereinafter Discharger) owns and operates a municipal publicly owned treatment works (POTW) located near Ferndale, California adjacent to Francis Creek near its confluence with the Salt River, a tributary of the Eel River. The POTW provides secondary treatment and consists of a gravity collection system, seven-acre aerated oxidation pond, settling basin, chlorine contact basin, and dechlorination system. Dry weather design flow is 0.576 million gallons per day (mgd); average dry weather flow is approximately 0.32 mgd; and peak wet weather flows reach approximately 3.85 mgd.
- 2. The POTW is regulated by Waste Discharge Requirements Order No. R1-2008-0038, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0022721, WDID No. 1B83136OHUM, adopted by the Regional Water Board on June 12, 2008 (hereinafter referred to as the "Permit"). Order No. R1-2008-0038 superseded Order No. R1-2000-92 (hereinafter referred to as "Previous Permit"), violations of which have been the subject of preceding Cease and Desist Orders, including Order R1-2003-0049, Order No. R1-2005-0087, and Order No. R1-2006-0109.
- 3. The Regional Water Board adopted a Water Quality Control Plan for the North Coast Region (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. The Basin Plan at page 2-1 states that the beneficial uses of any specifically identified water body generally apply to its tributary streams. The Basin Plan does not specifically identify beneficial uses for Francis Creek or the Salt River, but does identify present and potential uses for the Eel River, to which Francis Creek and the Salt River are tributary.
- 4. Pursuant to provisions of the Basin Plan, and discharge prohibitions set forth in Ferndale's Permit and Previous Permit, Ferndale is restricted from discharging effluent to the Eel River and its tributaries from October 1 to May 14 each year to flows no greater than one percent of the receiving water flow (hereinafter referred to as waste discharge rate limitations). Similarly, the Basin Plan and Ferndale's

Permit (and previous permits) prohibit effluent discharges to the Eel River and its tributaries from May 15 through September 30.

- 5. Francis Creek is a tributary of Salt River, and Salt River is a tributary of the Eel River. Wastewater flow volumes from the Discharger's POTW typically exceed one percent of the receiving water flow as measured at the confluence with the Salt River during the winter months, which is a violation of waste discharge rate limitations in the Basin Plan and Ferndale's Permit.
- 6. The Discharger is violating, or threatening to violate, the following terms in its Permit:

# III. Discharge Prohibitions

- **B.** Creation of pollution, contamination, or nuisance, as defined by section 13050 of the California Water code is prohibited.
- I. During the period from October 1 through May 14, discharges of treated wastewater shall not exceed one percent of the combined flow of Francis Creek and the Salt River, as measured at their confluence.
- 7. The Discharger is violating, or threatening to violate, the following provisions of the Basin Plan:

## 4. IMPLEMENTATION PLANS POINT SOURCE MEASURES

Under this authority and in order to achieve water quality objectives, protect present and future beneficial water uses, protect public health, and prevent nuisance, the Regional Water Board declares that point source waste discharges are prohibited in the following locations:

North Coastal Basin: The Mad and the Eel rivers and their tributaries during the period May 15 through September 30 and during all other periods when the waste discharge flow is greater than one percent of the receiving stream's flow as set forth in NPDES permits.

8. On May 15, 2003, the Regional Water Board adopted Cease and Desist Order No. R1-2003-0049 (CDO#1) for violations and threatened violations of the waste discharge rate limitations of the Previous Permit. Order No. R1-2003-0049 did not impose a connection restriction on the POTW, but established time schedules for tasks associated with development of an alternative that would stop violations of the 100:1 discharge rate requirement in the Previous Permit. CDO#1 required full compliance with the waste discharge rate limitations in the Previous Permit by February 1, 2005. Initial tasks in CDO#1 were completed, including submittal of a Corrective Action Plan (CAP) in December 2003, providing a detailed analysis of alternatives to stop the violations of the waste discharge rate limitations. The CAP recommended POTW upgrade by constructing a sequencing batch reactor (SBR) system within the existing footprint of the POTW and headworks areas. However, because of funding issues, project costs, which exceed original estimates, regional efforts to restore the Salt River, and community input, the Discharger did not proceed with the

SBR project. The City Council appointed a technical review team in May 2005 to reevaluate the feasibility, costs, life cycles, land requirements, and construction issues related to various system alternatives to bring the POTW in compliance with the waste discharge rate limitations. The Discharger requested an extension of time to comply with Order No. R1-2000-92.

- 9. On October 12, 2005, the Regional Water Board adopted Order No. R1-2005-0087 (CDO#2), which amended CDO#1 to provide a new schedule and milestone tasks to achieve compliance. CDO#2 imposed a restriction prohibiting new flows to the POTW unless an offset of 2:1 inflow reduction was achieved, subject to the satisfaction of the Executive Officer of the Regional Water Board. The Discharger completed Tasks A through E on or before the designated compliance dates.
- 10. Compliance with Task A of CDO#2, resulted in improvements to dissolved oxygen concentrations in Francis Creek downstream of the POTW effluent discharge point. In compliance with Task B of Order No. CDO#2, the Discharger submitted an alternatives analysis and identified an upgrade of the POTW using Biolac treatment combined with surge storage, as the official project proposed to achieve compliance with the waste discharge rate limitations (hereinafter referred to as "Proposed Project"). Specifically, these upgrades were to produce consistent high quality effluent, thereby supporting a request for exception to the waste discharge rate limitation requirement for wintertime effluent discharges.
- 11. The schedule originally proposed by the Discharger and adopted for the remaining tasks under CDO#2, including acquisition of financing, proved too ambitious. The Discharger requested additional time to complete the remaining tasks and achieve full compliance with Order No. R1-2000-92.
- 12. On August 10 and September 19, 2006, the Discharger submitted written requests for an extension of time to complete remaining tasks in CDO#2. The Discharger proposed changes to the compliance schedule in order to allow for a thorough technical evaluation of the ability to meet the requirements for an exception to the waste discharge rate limitation for wintertime discharges to Francis Creek; provide additional time to acquire financing; further evaluate design plans; obtain permits; and complete construction. In addition, the Discharger requested an allowance of twenty new additional connections to the POTW system as milestone tasks were completed in order to alleviate a small portion of the financial burden the Discharger must bear to achieve compliance. On November 29, 2006, the Regional Water Board adopted Order No. R1-2006-0109 (CDO#3), amending and supplementing CDO#2.
- 13. The technical evaluation of effluent and receiving water data conducted for the requested exception to the waste discharge rate limitation indicated that additional monitoring would be required to provide adequate data to perform a thorough beneficial use analysis, as required for eligibility under the Basin Plan exception to the waste discharge rate limitation. The Discharger's engineer determined, based upon best professional judgment, that one additional year of sampling and analysis was necessary. Due to delays associated with these

additional monitoring needs, as well as further unanticipated funding difficulties, the Discharger determined that compliance with the deadlines set forth under CDO#3 would not be possible. As a result, on April 21, 2008, the Discharger submitted a written request for an extension of time to complete remaining tasks in CDO#3. The Discharger proposed a compliance schedule that would accommodate the substantial additional monitoring requirements suggested by its engineer to obtain the data to support the requested exception to the waste discharge rate limitation for wintertime discharges to Francis Creek. Because treatment system design will be, in part, predicated upon the results of the request for the exception to the waste discharge rate limitation, the proposed schedule must also provide additional time to further design plans, acquire financing, obtain permits, and complete construction of the Proposed Project, as previously set forth in CDO#3. The proposed changes to the schedule would delay final compliance with the effluent limits in the Permit for up to two years from the deadlines currently stated in CDO#3.

- Pursuant to title 23 of the California Code of Regulations, section 2244.3, subdivision (b), prohibitions or restrictions on additional discharges to a POTW may be removed by the Regional Water Board if the Board finds that: 1) consistent compliance with waste discharge requirements can be achieved only by construction of a facility which will take a substantial period of time to complete; 2) the discharger has the capacity, authority, and financial resources to complete the corrective measures necessary to achieve compliance and is currently proceeding with such corrective measures; 3) the corrective measures necessary to achieve compliance with requirements will be placed into operation by the discharger in the shortest practicable time; 4) all practicable interim repairs and improvements to the treatment process of the discharge that can be made have been made; and 5) during the interim period of time until compliance with requirements can be fully achieved the treatment processes of the discharge will be so managed, operated, maintained, and repaired as to reduce to a minimum the violations which resulted in the imposition of the prohibitions or restriction, and such minimum violations for the interim period of time involved will not significantly impair water quality or beneficial uses. If the Regional Water Board finds that the Discharger is in violation of any of these conditions prior to the time that consistent compliance with requirements has been achieved, the prohibitions or restrictions on additional discharges to the POTW will be reimposed.
- 15. The Regional Water Board finds that all of the conditions specified under finding 13 above have been or will be met, subject to verification by the Executive Officer, as the Discharger completes various tasks required under this Order.
- 16. Pursuant to Water Code section 13389 and title 14, California Code of Regulations, section 15321, this is an enforcement action for violations and threatened violations of waste discharge requirements and as such is exempt from the requirements of the California Environmental Quality Act (Public Resources Code sections 21000-21177).

17. On December 11, 2008, after due notice to the Discharger and all other affected persons, the Regional Water Board conducted a public hearing and received evidence regarding this cease and desist order.

IT IS HEREBY ORDERED PURSUANT TO CALIFORNIA WATER CODE SECTIONS 13243, 13300 and 13301 that Cease and Desist Order No. R1-2006-0109 is amended to read:

- The Discharger shall cease and desist from discharging and threatening to discharge waste in violation of the terms of the Permit, as described in Finding No. 5 above, by implementing the following time schedule:
  - Task A By **January 15, 2009**, submit for Executive Officer's review, a request for a variance to discharge in excess of one percent of the combined flow of Francis Creek and the Salt River during the period from October 1<sup>st</sup> to May 14<sup>th</sup>. The request for the variance shall address all requirements set forth in the Implementation Plan section of the Basin Plan (specifically at page 4-2.00), and at a minimum shall include evaluation of the following factors:
    - Identification of each constituent of concern (COC) known or reasonably thought to be present in POTW effluent;
    - Documentation of existing water quality for each COC in the receiving water upstream of POTW influence;
    - Comparison of most sensitive beneficial uses identified for the receiving water in the Basin Plan for each COC and their cumulative impacts; and
    - In light of receiving water quality and flows, conduct an evaluation of water quality and flows required in the POTW effluent to protect the beneficial uses of receiving water.
  - Task B By **March 1, 2009**, submit 50% design plans and specifications for construction of the proposed project.
  - Task C By **October 1, 2009**, secure funding for the proposed project. Provide the Regional Water Board with documentation regarding the funding source(s).
  - Task D By **November 1, 2009,** submit final design plans for the proposed project. The final design shall be accompanied by an application for waste discharge requirements permit renewal.
  - Task E By **May 1, 2010**, acquire all necessary permits, including waste discharge requirements from the Regional Water Board.
  - Task F By **September 1, 2011**, complete construction of the proposed project.
  - Task G By **November 1, 2011**, attain full compliance with waste discharge requirements by completing the implementation of long-term plans for treated effluent disposal during the wintertime season.

- 2. The addition of new flows of wastewater to the POTW (after October 4, 2004) from new residential, commercial, industrial, and/or governmental connections is restricted as follows until such time that it can be demonstrated to the satisfaction of the Regional Water Board that more connections will not result in additional violations of terms of the Permit, as described in Finding No. 5 above. (California Code of Regulations, title 23 § 2244.) The following allowances and restrictions apply:
  - The equivalent of 10 single-family dwellings or 4,500 gallons per day, whichever is less, may be added upon completion of the variance request under Task A above to the satisfaction of the Executive Officer;
  - The equivalent of 10 single-family dwellings or 4,500 gallons per day, whichever is less, may be added upon attainment of appropriate project financing as required under Task C above;
  - New or existing connections, whose increase of flows of wastewater are
    offset by a discharge reduction of wastewater by 2:1 to the collection system
    are not considered to be additional flows restricted by this Order through
    November 1, 2009. The demonstration of off-set shall be supported with
    technical information to the satisfaction of the Executive Officer.
- 3. If, in the opinion of the Executive Officer, the discharger fails to comply with the provisions of this Order, the Executive Officer may apply to the Attorney General for judicial enforcement or issue a complaint for administrative civil liability.

## CERTIFICATION

I, Catherine E. Kuhlman, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on December 11, 2008.

Catherine E. Kuhlman Executive Officer

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